

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 2, line 14, with the following rewritten paragraph:

1 As computer systems started to utilize more graphic images and video
2 conferencing became more desirable, the communication of video data has
3 become important over both LANs and WANs. While separate means for
4 communication of video between end users could have been developed, it is
5 desirable to simultaneously communicate ~~communication~~ video data, audio data,
6 and digital data across a LAN and a WAN.

Please replace the paragraph beginning at page 6, line 1, with the following rewritten paragraph:

1 The ATM network architecture is generally organized in independent
2 communication layers which are based on the OSI reference model. Briefly,
3 some of the various functions performed at the communication layers are
4 described. The physical layer specifies the physical medium and transmission
5 convergence where adaptation to the transmission interface occurs. The
6 physical medium considers the bit timing that is required and ~~an~~ the type of
7 connectors, cabling, impedances, and protocol used at the physical medium. At
8 the ATM layer generic flow control is considered, the cell header is generated or
9 removed and passed to the respective next layer, the VPI/VCI address may be
10 analyzed or translated and the ATM cells are multiplexed and demultiplexed as
11 the case may be. At the ATM Adaptation Layer there is a segmentation and
12 reassembly sublayer (SAR). The SAR sublayer provides for the segmentation of
13 protocol data units (PDUs) into ATM cells or assembles ATM cells into PDUs
14 that are passed to the higher layer.

Please replace the paragraph beginning at page 12, line 5, with the following rewritten paragraph:

1 The peripheral or chip interconnect allows an external or embedded host
2 processor 190 access to the xDSL router/gateway 100. Thus, the host
3 processor 190 can initialize and configure the router/gateway 100 (e.g. enable
4 functions, initialize DMAs with buffer pointers etc.) at start-up, as well as perform
5 ~~performing~~ accesses to the router/gateway 100 during run-time. (The run-time
6 tasks can include setting up and tearing down ATM connections, queuing
7 packets for transmit, return buffers to DMAs, and service completion rings, etc.)
8 For integration of the xDSL router/gateway 100 including the ATM module, the
9 peripheral interconnect is preferably a VBUS. A VBUS is a Texas Instrument
10 proprietary shared bus system with a central resource master/slave arrangement
11 using "request" and "grants" through the central resource for interconnection.
12 This interface could, however, be a standard interface (e.g. PCI) or a generic but
13 proprietary interface (e.g. HPI or XBUS) for standalone module applications.